

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A continuous casting mold for casting molten metals, particularly molten steel materials, at high casting rates to form polygonal billet, bloom, and preliminary section castings ~~and the like~~, comprising a tubular mold made of copper or of copper alloys whose entry cross-section on a the pouring-in side has a cross-section which is enlarged compared to an the exit cross-section on a the casting exit side, the mold also having ~~and~~ corner radii, wherein the mold has an inner geometrical cross-section below the entry cross-section, the inner geometrical cross-section form and the associated dimensions measurements are designed analogous to a the locally deducible quantity of a the solidification heat for the continuous casting according to a the progression of the temperature progression diagram along ~~across~~ the mold height, starting with a the cross-section enlargement on the pouring-in side opposite the exit cross-section on the casting exit side, wherein on the pouring-in side, in an the area of the casting

surface mirror a first conical section ~~of great conicity~~, and immediately adjacent a second section having ~~of~~ greater conicity, and beneath ~~under~~ the section of greater conicity, a section with continuously variable conicity corresponding ~~according~~ to the casting shell growth and ~~the~~ contraction of the continuous casting up to ~~until~~ the exit cross-section are ~~is~~ successively arranged such that the wall volume of the mold is reduced according to the dissipated heat quantity per time unit and a heat dissipation diagram across the mold height by enlarging the exterior surface of the tubular mold by means of notches ~~or the like~~ and by reducing the wall thickness in at least separate height ranges of the mold analogous to ~~the~~ thermal expansion of the mold.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) The continuous casting mold according to claim 1, wherein, starting at the entry cross-section, a centric, approximately parabola-shaped recess is provided for each cross-section side of the mold.

5. (Previously presented) The continuous casting mold according to claim 4, wherein the approximately parabola-shaped recess diminishes in the direction towards the casting exit side.

6. (Previously presented) The continuous casting mold according to claim 4, wherein the length of the approximately parabola-shaped recess extends approximately into half the tubular mold height.

7. (Currently Amended) The continuous casting mold according to claim 4, wherein the length of the approximately parabola-shaped recess is adapted to the contraction amount ~~measure~~ at the height of the respective broadside and/or narrowside ~~edge~~ of the mold cross-section.

8. (Currently Amended) The continuous casting mold according to claim 1, wherein in the area of each ~~[[a]]~~ corner radius in the cross-section plane of the entry cross-section one adjoining, circumferentially extending surface ~~each~~ extends downwards toward ~~to~~ the casting surface ~~mirror~~ which connects to an analogous identical counter surface starting at the casting surface up to a ~~mirror until the~~ transition into the geometrical cross-section form.